

moment when the sphincter dilates to allow the escape of the water which has served for respiration, it bends round quickly, and gliding its slender tail along its body, passes it in an instant into the cloaca of the *Holothuria*. This first step taken, the rest of the operation may occupy more or less time. A small *Fierasfer* attacking a large *Holothuria* sometimes succeeds in making an entrance at once. But should there be any disproportion of size the parasite waits for the respiratory stream to dilate the anus, and then pushes further in; and it is only by long-continued efforts that it finally enters. Prof. Emery has seen as many as seven of these fish successively enter the body of the same individual.

The *Fierasfer* lodges at first in the respiratory tree of the *Holothuria*, which opens into the intestine not far from the anus; but it is also found in the perivisceral cavity, because the respiratory tree is most frequently torn by the efforts of the little fish, especially when it receives several of them at the same time. The *Fierasfer*, however, is not a true parasite feeding at the expense of its host, but gets its nourishment from the sea by pushing its head out of the *Holothuria*. The position of its anus, which is placed very near the head, also enables it to evacuate the faecal matters and the sexual products without quitting its domicile.

This singular fish consequently makes use of the *Holothuria* as a habitation, or as a refuge from its enemies. It is therefore what we may call a *commensal* in the words of Van Beneden, or, as Prof. Emery expresses it, a lodger-parasite (*inquilinus*).—*R. Accul. dei Lincei, Atti*, ser. 3, vol. vii. 1880; *Bibl. Univ., Archives des Sciences*, December 15, 1881, p. 627.

*Mode of Capture of Lizards in Southern Europe.* By Dr. T. EIMER.

In my memoir on *Lacerta muralis cerulea* I described the peculiar method, usual in Italy, by which the boys there catch lizards: they make a noose at the end of a long stiff haulm of grass, and fill this with saliva so as to appear like a shining mirror. They hold the grass-haulm towards a lizard, which, being very inquisitive, comes nearer and nearer in order to examine the apparatus, and in the midst of its curiosity easily allows the noose to be drawn over its head.

The celebrated statue of the *Sauroctonus*\*, as is well known, represents a youth, still of tender age, who, leaning with his left arm upon the trunk of a tree, and holding in his right hand a piece of a rod, in a watchful attitude follows with his eyes a lizard running up the trunk of the tree, with the object, as the archaeologists think, either of tickling or transfixing it with the above-mentioned rod, as with a dart, a fragment of which the rod would represent. The latter opinion, so far as I know, relates to the statement of Pliny†,

\* *Σαυροκτόνος*, lizard-killer.

† *Hist. Nat.* xxxiv. 70.

who says, "fecit" (ex ære Praxiteles, to whom he ascribes the statue) "puberem Apollinem subreptenti lacertæ cominus sagitta insidiantem, quem sauroctonon vocant." Apollo is supposed to wish to obtain predictions from the struggles of the dying lizard. An epigram of Martial\* relating to our statue runs as follows:—

"*Sauroctonos Corinthius*" [i. e. of Corinthian brass].

"Ad te reptanti, puer insidioso, lacertæ  
Parce, cupit digitis illa perire tuis."

The lizard, therefore, is creeping up to the boy. This and the whole bearing of the Sauroctonus, which is quietly expectant and almost negligent, the attitude of the right arm and hand, the mode in which the latter holds the rod in its fingers, lightly and easily, not firmly and securely as one holds a dart with which one intends to kill, and, lastly, the peaceable expression of the face, indicating sport rather than any thing serious, all appear to me to show most definitely that in the Sauroctonus we have before us a boy waiting for a lizard with a grass noose and not with a dart. It is by this explanation that the whole statue becomes intelligible, and appears in all its harmonious truth to life.

It is well known that there is in the Vatican a copy of the original in marble, which was dug up on the Palatine Hill in 1777; another, smaller one, in bronze, found near S. Balbina, in the Villa Albani, in Rome; another in Paris, &c. The first two I know well by personal inspection. In the best-known and finest of them, that in the Vatican, both arms from the shoulders are new. In the example in the Villa Albani the arms are old; according to one of the statements accessible to me at the moment, the right hand has, however, been restored in this†. Be this as it may, the attitude of the right arm, hand, and fingers in both cases is such that it can be connected only with the light and easy holding of a grass-haulm, and not of a dart. I would, however, lay the chief stress upon the other characters of the statue, which, as already stated, can only be brought into accordance with the former conception.

It would be interesting to know whether the method of capturing lizards with the noose is practised in Greece, as is very probable, considering the old relations of the Greeks and Romans; but even if this should not be the case, these relations would suffice to have given Praxiteles the material for his statue.

Thus the practice of this method would be shown to be very ancient. To what ancient times similar practices may be traced back, how tenaciously they transmit themselves to later ages and maintain themselves therein, is proved by a fresco painting in the Etruscan Museum of the Vatican, representing a boy who allows a

\* xiv. 172.

† In the example in Paris also the right forearm and hand are new, as also the fingers of the left hand.

bird held by a thread attached to its legs to flutter about. This is a practice which is still one of the commonest acts of the daily cruelty to animals witnessed in Italy, and has consequently occupied thoughtless human creatures at least since the time of the Etruscan people, which loses itself in the obscurity of an unknown past.—*Archiv für Naturgeschichte*, xlvii. (1881) pp. 514–516.

*Note on some obscure Points in the Organization and Development of the Echinorhynchi.* By M. MÉGNIN.

The *Echinorhynchi* are generally regarded as entirely destitute of a mouth and digestive organs. M. Lespés has described what he thought was a digestive organ in the trunk of *Echinorhynchus gigas*; but his view has not been adopted by subsequent authors; and M. Mégnin thinks that the cavity that exists in the interior of the trunk is the result of a disposition rendered necessary by the alternate erection and retraction of the trunk, like the finger of a glove, frequently observed in these worms.

His own investigations have been pursued for several years upon different species of *Echinorhynchi*, both adult and in the state of encysted larvæ, obtained from fishes, reptiles, birds, and Cetacea; and he states that, although the cavity of the trunk may not be a digestive organ, such an organ nevertheless exists. In many *Echinorhynchi* there are two pyriform organs, which open at the base of the neck in the species which have not the trunk sessile, and at the base of the trunk in those which have no neck. These organs, called *menisei*, were regarded by Dujardin as a salivary apparatus; but all other helminthologists have confessed ignorance of their significance and function. In some encysted larvæ of *Echinorhynchi*, obtained from the cellular tissue of *Varani* and of a pheasant, the author found that these *menisei* filled the cavity of the body and opened at the base of the trunk in a large buccal pore with finely-folded lips. In a specimen of *Echinorhynchus brevicollis* from the whale the *menisei* were replaced by two long cylindrical tubes, opening into a furrow at the base of the trunk, and extending to the extremity of the body on each side of the generative organs. The interior of these tubes was lined with polygonal cells strongly impregnated with fat-globules of a reddish-yellow colour; and the author describes them as presenting a complete analogy with the bifid intestine of certain *Distoma*.

This intestine exists in the encysted larvæ of the *Echinorhynchi*, but is atrophied and represented only by the *menisei* in most of the adults, although, as above stated, it persists in some. The fact of the presence of a bifurcate intestine in the *Echinorhynchi* approximates those worms to the Trematoda, and removes them from the Nematoda, with which they have hitherto been classed.—*Comptes Rendus*, December 12, 1881, p. 1054.